

NEW ICHTHYOLOGICAL RECORDS.

BY TOM C. MARSHALL.

The Queensland Museum is fortunate in having a public who are aware of the need of securing specimens of unusual interest and who respond readily to calls for material from certain localities. Space does not permit me to mention our numerous donors of specimens, but foremost among our many honorary collectors are Mr. George Coates of Townsville, Alderman W. R. Howard of Wynnum and Fisheries Inspector W. Hiddens (late of Brisbane and now of Townsville). No less than one hundred and fifty-one specimens of fishes were collected and presented by Mr. George Coates for the year ending December, 1940. Many of these were new records or rare material and form the basis of these notes. Our thanks are due to these "friends of the Museum" for their unstinting help and interest in their State Museum and its collections.

Family CLUPEIDAE.

CLUPEA (HARENGULA) KONINGSBERGERI M. Web. & de Beau.

Clupea (Harengula) koningsbergi Max Weber and L. F. de Beaufort. Akad. Verhand. Amsterdam 17, No. 3, 1912, p. 14.

Clupea (Harengula) koningsbergi M. Weber and de Beaufort. Fishes Indo-Austr. Arch. 2, 1913, p. 72.

Harengula maccullochi Whitley. Rec. Aust. Mus. 18, 1931, p. 143, fig. 2. Type locality Port Headland, North-Western Australia.

Eight specimens, from West Molle Island, Cape Cleveland and Low Isles, the largest measuring 165 mm. in total length. New record for Queensland.

CLUPEA (HARENGULA) ATRICAUDA Gthr.

Clupea atricauda Gunther. Cat. Fish. Brit. Mus. 7, 1868, p. 426.

Three examples in the collection, the largest 115 mm. in total length. Labelled "Queensland Coast." Collected by K. Broadbent. New record for Australia.

Family ARIIDAE.

TACHYSURUS PROXIMUS (Ogilby).

Arius proximus Ogilby. Proc. Linn. Soc. N.S.W. 23, 1898, p. 280.

Tachysurus (Pararius) proximus Whitley. Aust. Zool. 9, 1940, p. 409, fig. 16.

Two specimens presented by G. Coates. One from Cape Pallarenda, N. Qld., is 14 inches in total length. The other is from the Bohle River, near Townsville, and is 15 inches in total length. The latter was carrying 14 juveniles in its mouth when captured, disgorging them when laid on the beach. They each measured 70 mm. in total length. (No. 7142). New record for Queensland.

Family OPHICHTHYIDAE.

PISODONOPHIS CANCRIVORUS (Rich.).

Ophisurus cancrivorus Richardson. Zool. Voy. Erebus and Terror, Fish. 1848, p. 97, pl. 50, figs. 6-9.

Two specimens, 12 inches in total length, from Bowen, Nth. Qld. Presented by the late E. H. Rainford. (No. 4407). New record for Queensland.

MALVOLIOPHIS PINGUIS (Gthr.).

Ophichthys pinguis Gunther. In Brechley, Cruise Curacoa, 1873, p. 430, pl. 35.

Ten specimens from various localities in South Queensland, the most northerly being Yeppoon. The largest, which measures $16\frac{1}{4}$ inches in total length, was presented by Mr. E. Baird, who captured it at Caloundra. (No. 4864). New record for Queensland.

Family SYNODONTIDAE.

SAURIDA GRACILIS (Quoy & Gaimard).

Saurus gracilis Quoy and Gaimard. Voy. Uranie, Physic. Zool. 1824, p. 224.

In the old collection of the museum is a specimen of 225 mm. in total length, from Moreton Bay. (No. 427). New record for Queensland.

Family SYNGNATHIDAE.

SYNGNATHUS TIGRIS Castelnau.

Syngnathus tigris Castelnau. Proc. Linn. Soc. N.S.W., 3, 1879, p. 397.

Several in the collection, all from Moreton Bay, the largest measuring $9\frac{1}{2}$ inches in total length. New record for Queensland.

Family BELONIDAE.

TYLOSURUS LEIURUS (Blkr.).

Belone leiurus Bleeker. Nat. Tijdschr. Ned. Indie, 1, 1850, p. 94.

Four specimens captured off Townsville and presented by G. Coates. The largest, from Cape Cleveland, measures 32 inches in total length. (No. 5981). New record for Australia.

Family MELANOTAENIIDAE.

AMNERIS RUBROSTRIATA (Ramsay & Ogilby).

Nematocentris rubrostriatus Ramsay and Ogilby. Proc. Linn. Soc. N.S.W. (2) 1, 1886, p. 14. Strickland River, Papua.

Twenty examples of this handsome species were forwarded to the Museum from Townsville by Mr. G. Coates, who obtained them in the Leichhardt Creek, near Townsville. The largest measures $5\frac{1}{2}$ inches in total length. Five were received alive and placed in the Museum's aquarium on 11th November, 1940, where, with the exception of one, they are still thriving. New record for Australia.

Family POLYNEMIDAE.

POLYNEMUS HEPTADACTYLUS Cuv. & Val.

Polynemus heptadactylus Cuvier and Valenciennes. Hist. Nat. Poissons, 3, 1829, p. 390.

Mr. W. R. Howard presented two specimens which were caught at St Helena, Moreton Bay, the larger one measuring $11\frac{1}{2}$ inches in total length (Nos. 4719-20). A third example was received from G. Coates. Locality Cape Cleveland, North Queensland. (No. 5639). New record for Australia.

Family SPHYRAENIDAE.

SPHYRAENA JELLO Cuv. & Val.

Sphyraena jello Cuvier and Valenciennes. Hist. Nat. Poissons, 3, 1829, p. 349.

A twenty-four inch specimen from Stradbroke Island, Moreton Bay. Presented by Mr. W. R. Howard (No. 5126). Two others from Cape Cleveland, near Townsville, were collected by G. Coates. They measure 19 inches and $14\frac{1}{2}$ inches in total length. (Nos. 5977, 6129). New record for Australia.

Family HOLOCENTRIDAE.

HOLOCENTRUM CORNUTUM Blkr.

Holocentrum cornutum Bleeker. Nat. Tijdschr. Ned. Indie, 5, 1853, p. 240.

I obtained three examples of this handsome species on the coral reefs off Curacoa Island, Palm Group, North Queensland. The largest was $6\frac{1}{4}$ inches in total length. New record for Australia. (Nos. 6441, 5861-2).

HOLOCENTRUM DIADEMA Lace.

Holocentrus diadema Lacépède. Hist. Nat. Poissons, 5, 1803, p. 372, 374 (*vide* Weber and de Beaufort).

Two specimens are in the collection. They are labelled "Old Collection." Locality:—"Coast of Queensland." They measure $4\frac{1}{4}$ and $5\frac{3}{4}$ inches. New record for Australia.

MYRIPRISTIS MURDJAN (Forsk.)

Sciaena murdjan Forskal. Descript. Animal. 1775, p. 48.

A $6\frac{1}{4}$ inch specimen was collected by me off Curacoa Island, North Queensland (No. 5868). A second example was obtained on Keeper Reef, North Queensland, by G. Coates (No. 6987), length $2\frac{1}{2}$ inches. New record for Australia.

Family SERRANIDAE.

Subfamily EPINEPHELINAE.

EPINEPHELUS FARIO (*Thunb.*).

Perca fario Thunberg. Kon. Vet. Acad. Nya. Handl. 14, 1793, p. 296, pl. 9.

One example, 14 inches in total length, from Lodestone Reef, N.Q., was collected by G. Coates. (No. 5539). New record for Australia.

CEPHALOPHOLIS ROGA (Forsk.).

Red-flushed Rock Cod.

Percia roga Forskal. Descript. Animal. 1775, p. 38.

A fine, large specimen of this fish was received from G. Coates, who captured it on Wheeler Reef, North Queensland. Total length 19 inches. The colours, when received in ice at Brisbane, were:—Blackish-brown, very little paler below; a scarlet-red flush showing through between the scales from back to belly; beneath the maxillary, the mouth-parts, in the throat and beneath the gill-covers bright scarlet; the blackish spinous dorsal tipped with dark scarlet; other fins and caudal blackish. (No. 7063). New record for Australia.

Family PRIACANTHIDAE.

PRIACANTHUS TAYENUS Rich.

Priacanthus tayenus Richardson. Rep. Ichth. China, Rep. 15th meeting Brit. Assoc. (1845) 1846, p. 237.

Two specimens measuring 10 and 11 inches in total length, have D. X/12: distinct rich dark brown spots in ventrals. Caudals crescentic, with the lobes much produced. They are from Magnetic Island, North Queensland, presented by G. Coates. (Nos. 6617, 6769). New record for Australia.

Family APOGONIDAE.

APOGON RUPPELLII Gthr.

Apogon ruppellii Gunther. Cat. Fish. Brit. Mus. 1, 1859, p. 236.

Three specimens are in the old collection of the Museum, labelled "Cape York." Three others were collected by me at Prince of Wales Island, Cape York. They measure 3½ inches each in total length. (Nos. 6540-2). New record for Queensland.

Family CARANGIDAE.

Subfamily CARANGINAE.

CARANX (CARANX) MELAMPYGUS Cuv. & Val.

Caranx melampygus Cuvier and Valenciennes. Hist. Nat. Poiss. 9, 1833, p. 116.

Caranx melampygus McCulloch. Mem. Qld. Mus. 8, 1924, p. 70, pl. 11, fig. 2. Port Moresby, Papua.

Two specimens from Magnetic Island, North Queensland, the larger one 12¾ inches in total length, collected by G. Coates (Nos. 6654, 7007). A third one is from Noosa, South Queensland, presented by L. Kesteven (No. 6955). These three examples agree well with McCulloch's description and plate but I am only able to find seven dorsal spines, preceded by a strong procumbent one in all three specimens. New record for Australia.

CARANX (SELAR) MATE Cuv. & Val.

Caranx mate Cuvier and Valenciennes. Hist. Nat. Poissons, 9, 1833, p. 54.

Caranx mate Weber and de Beaufort. Fishes Indo-Aust. Arch. 6, 1931, p. 207.

Three specimens, one from the Barnard Group, collected by the late Dr. W. E. J. Paradise, (No. 4084), the other two from Magnetic Island, North Queensland. Lengths 11 inches. Collected by G. Coates. (Nos. 7060-1). Their

colour on arrival in ice at Brisbane was:—Beautiful light greenish-blue iridescence above; dark-bluish on head; sides and below silvery-white; eight or nine very obscure broad grey transverse bars on body; dorsals tinged yellowish; pectorals almost hyaline; ventrals and anal white; caudal canary-yellow; a dense black blotch on the scapula. McCulloch¹ recorded this species from Broome, Northwestern Australia, under the name of *C. affinis*. New record for Queensland.

Subfamily CHORINEMINAE.

CHORINEMUS TOLOOPARAH (Rupp.).

Lichia tolooparah Ruppell. Atl. Fische Rot. Meer 1828, p. 91.

Seven examples are in the collection. They are from various localities on the Queensland coast, from Moreton Bay to the Gulf of Carpentaria. The largest is 8 $\frac{3}{4}$ inches in total length and is from Cape Cleveland, Nth. Qld. Collected by G. Coates. New record for Australia.

Subfamily SERIOLINAE.

SERIOLA NIGROFASCIATA (Rupp.).

Nomeus nigrofasciatus Ruppell. Atl. Reise N. Afrika 1826-1831, p. 82 (*vide* Fowler).

Two examples, one being from Moreton Bay; total length 12 inches, collected by J. D. Ogilby; the other from Cape Cleveland, North Queensland; total length 15 $\frac{1}{2}$ inches. Collected by G. Coates. (Nos. 3072, 6035). New record for Australia.

SERIOLA DUMERILI (Risso).

Caranx dumerili Risso. Ichthyol. Nice. 1810, p. 175.

A large specimen, 33 inches in total length, was caught off Mooloolaba, South Queensland, and presented by Mr. F. Z. Eager. (No. 6709). A new record for Australia.

Family LUTJANIDAE.

Subfamily LUTJANINAE.

PARACAESIO PEDLEYI McCull. & Waite.

Paracaesio pedleyi McCulloch and Waite. Trans. Roy. Soc. Sth. Aust. 40, 1916, p. 440, pl. 42.

Several specimens are in the collection from localities in South Queensland, from Moreton Bay to Mooloolaba. The largest measures 15 inches. New record for Queensland.

CAESIO DIGRAMMA Blkr.

Caesio digramma Bleeker. Ned. Tijdschr. Dierk. 2, 1865, p. 180.

Mr. G. Coates collected a specimen 9 inches in total length, in the Whitsunday Passage. (No. 6254). New record for Australia.

LUTJANUS JANTHINUROPTERUS (Blkr.).

Mesoprion janthinuropterus Bleeker. Nat. Tijdschr. Ned. Indie. 3, 1852, p. 751.

Three specimens from the reefs adjacent to Townsville were collected by G. Coates. The largest, which measured 13 inches in total length, is from Cordelia Rocks. (Nos. 6564, 6655, 5287). New record for Queensland.

¹McCulloch. Biol. Res. "Endeavour" 3, pt. 3, 1915, p. 130.

Subfamily NEMIPTERINAE.

SCOLOPSIS BILINEATUS (Bloch).

Anthias bilineatus Bloch. Ausland. Fische. 7, 1793, p. 3.

Several examples of this handsome species were collected by me at Curacoa Island, Palm Group, North Queensland, the largest measuring $7\frac{3}{4}$ inches (Nos. 5892-4). Others are in the collection, one from Murray Island, Torres Strait, and others from the reefs off Townsville, collected by G. Coates. Life colours of my specimens were:—Olive-green above, mostly over head to about 3rd dorsal spine; snout golden-brown; beneath soft dorsal light blue; sides of body very pale green; belly white, tinged pale green; a broad white stripe, bordered on each edge with a narrow red line, runs from the mouth backwards and upwards to the second dorsal ray; spinous dorsal to 9th spine light cadmium (except at the bases of the last 5 spines) followed by a black-red blotch on the terminal half of the last spine and first 3 rays; last 6 rays and membranes clear white, which colour runs forward beneath the black-red blotch and the yellow spinous dorsal to the base of the 4th dorsal spine; pectorals hyaline, tinged yellow; ventrals white, the anterior edge pale orange; anal with the 3 spines and the first 2 rays black, the next membrane white, edged red; rest of fin hyaline; a golden-brown saddle, tinged red, over the caudal peduncle; caudal pale reddish-brown. Eye with pupil black and with an orange patch anteriorly and posteriorly, rest green and silver. New record for Australia.

SCOLOPSIS CANCELLATUS Cuv. & Val.

Scolopsides cancellatus Cuvier and Valenciennes. Hist. Nat. Poissons, 5, 1830, p. 351.

I collected three specimens of this species at Palm Islands, North Queensland, and Yorke Island, Torres Strait, the largest being $6\frac{1}{4}$ inches in total length. New record for Australia.

Subfamily POMADASYNAE.

PLECTORHYNCHUS CELEBICUS Blkr.

Plectorhynchus celebicus Bleeker. Ned. Tijdschr. Dierk. 4, (1872) 1873, p. 285.

Mr. G. Coates collected two at Magnetic Island, North Queensland. They measure 13 and $13\frac{1}{2}$ inches in total length. There is also an old mounted specimen, $7\frac{3}{4}$ inches in total length from "Queensland Coast" in the collection. (Nos. 6288, 6768). New record for Australia.

PLECTORHYNCHUS PUNCTATISSIMUS (Playfair).

Diagramma punctatissimum Playfair. Proc. Zool. Soc. London, 1867, p. 851, pl. 40.

A specimen collected at Rib Reef by G. Coates agrees very well with Playfair's description and plate. Total length $22\frac{1}{2}$ inches. (No. 6822). New record for Australia.

PLECTORHYNCHUS GOLDMANNI (Blkr.).

Diagramma goldmanni Bleeker. Nat. Tijdschr. Ned. Indie. 4, 1853, p. 602.

One specimen, $24\frac{1}{2}$ inches in total length. Collected by G. Coates at Cape Cleveland, North Queensland. (No. 6749). New record for Australia.

PLECTORHYNCHUS SCHOTAF Forsk.

Sciaena abu-mgaterin schotaf Forskal. Deser. Animal. 1775, p. 51.

Diagramma griseum Day. Fishes of India, 1878-88, p. 81, pl. 21, fig. 2.

Plectorhynchus schotaf Fowler. Bull. 100, U.S. Nat. Mus. Vol. 11, 1931, p. 255.

A specimen $8\frac{3}{4}$ inches in total length agrees well with Day's figure and Fowler's description. It is from Prince of Wales Island, Torres Strait; collected T. C. Marshall (No. 6496). It has 89 scales above the lateral line between its origin and hypural joint and 19 above the lateral line and the base of the fourth dorsal spine. Colour in formalin uniform slaty-brown, with ventral, anal and caudal fins darker; lips and throat pinkish-white. When fresh the colour was somewhat similar, there being no trace of any spots or bands.

Fowler has included *P. reticulatus* McCulloch¹ in the synonymy of this species. It is not impossible that with further specimens they may prove to be the same species but on account of the much smaller scales and uniform coloration and other minor differences I prefer to keep them, provisionally, apart.

POMADASYS ARGYREUS (Cuv. & Val.).

Pristipoma argyreum Cuvier and Valenciennes. Hist. Nat. Poissons, 9, 1833, p. 485.

One specimen, 3 inches in total length, from off Bowen, North Queensland. (No. 3180). New record for Australia.

Subfamily LETHRININAE.

LETHRINUS VARIEGATUS Cuv. & Val.

Lethrinus variegatus Cuvier and Valenciennes. Hist. Nat. Poissons, 6, 1830, p. 287.

Two specimens were forwarded by G. Coates. They are from Lodestone Reef and John Brewer Reef, Nth. Qld., and measure 11 inches in total length. (Nos. 5416, 6764). New record for Australia.

LETHRINUS MAHSENA (Forsk.).

Yellow-tailed Emperor.

Sciaena mahsena Forskal. Deser. Animal, 1775, p. 52.

Six examples of this common northern species are in the collection. The largest, which measures 17 inches in total length, was collected on Hopkinson Reef, off Cape Cleveland by G. Coates. (No. 6026). Mr. G. Roberts of Palm Island notes:—"This fish attains to at least 20 inches and is commonly found along the edges of all the reefs in the Palm Island Group." Commonly called "Snapper."

LETHRINUS ORNATUS Cuv. & Val.

Lethrinus ornatus Cuvier and Valenciennes. Hist. Nat. Poissons, 6, 1830, p. 310.

Lethrinus ornatus De Vis. Proc. Linn. Soc. N.S.W. 9, 1884, p. 458.

Lethrinus ornatus Weber and de Beaufort. Fish Indo-Austr. Arch. 7, 1936, p. 447.

Lethrinus devisianus Whitley. Rec. Austr. Mus. 17, 1929, p. 122 (on De Vis).

A specimen from Keeper Reef, Nth. Qld., presented by G. Coates, measures 13 inches in total length (No. 5423). The type of De Vis' *L. ornatus* is apparently lost, but his description suggests that Weber & de Beaufort are correct in placing that species in the synonymy of the above.

¹ McCulloch. Biol. Res. Endeavour, 4, pt. 4, 1916, p. 185, pl. 53 (*nee* Gunther).

Family PEMPHERIDAE.

PEMPHERIS KLUNZINGERI McCulloch.

Pempheris klunzingeri McCulloch. Zool. Res. Endeavour, 1, pt. 1, Dec. 1911, p. 47 (on Klunzinger).

A perfect specimen of this apparently rare fish was taken from the stomach of an *Epinephelus* which was caught off Salamander Rocks, Nth. Qld. It measures 5½ inches in total length. Presented by G. Coates. (No. 6307). New record for Queensland.

Family SCIAENIDAE.

PSEUDOSCIAENA DIACANTHUS (Lacé.).

Lutjanus diacanthus Lacépède. Hist. Nat. Poiss. 4, 1802; pp. 195, 240.

A fine specimen 16 inches in total length was caught off the Townsville Beach and presented by G. Coates (No. 7085). Apparently the species is common in North Queensland waters for Mr. Coates states:—"No. 7085 is, as far as I can see, one of the common jew-fish caught locally. I have caught them up to fifty pounds in weight and have seen one nearly one hundred pounds. Have seen as many as forty (7 to 30 lbs.) caught in one night by three men on hand-lines." New record for Australia.

SCIAENA DUSSUMIERI (Cuv. & Val.).

Umbrina dussumieri Cuvier and Valenciennes. Hist. Nat. Poiss. 9, 1833, p. 481.

Eight specimens of this small species are in the collection, five having been collected in the vicinity of Townsville by G. Coates; one from Yeppoon, collected by me, and two from "Queensland Coast," collected by Capt. Hoult. The largest example of the series is 9½ inches in total length. New record for Australia.

Family MULLIDAE.

UPENEUS SIGNATUS Gthr.

Upeneus signatus Gunther. Ann. Mag. Nat. Hist. (3) 20, 1867, p. 59.

Upeneus signatus Tosh. Parliam. Rept. Marine Dept. Qld. 1902-3 (1903), p. 3, pl. 3, fig. 2. (Southport, Sth. Qld.)

Pseudupeneus signatus McCulloch. Check-list of Fish Rec. from Aust., Mem. Aust. Mus. 5, 1929-30, p. 223.

Several specimens from Moreton Bay and Caloundra, South Queensland. The largest is 12 inches in total length, and is from Moreton Bay. Collected by Mr. C. O'Connell. (No. 4146).

Apparently Tosh first noted the species from Queensland, but his record was overlooked in the check-list by McCulloch.

PARUPENEUS SPILURUS (Blkr.).

Upeneus spilurus Bleeker. Nat. Tijdschr. Ned. Indie. 6, 1854, p. 395.

One specimen, 10 inches in total length, taken at Magnetic Island, Nth. Qld., by G. Coates. (No. 6947). New record for Queensland.

Family KYPHOSIDAE.

KYPHOSUS VAIGIENSIS (Quoy & Gaimard).

Pimelepterus vaigiensis Quoy and Gaimard. Voy. Uranie, Zool. 1824, p. 396, pl. 62, fig. 4.

Two examples were obtained by G. Coates, one at Upstart Bay, Nth. Qld. and the other at Magnetic Island, Nth. Qld. Total lengths 11 inches and 9 inches respectively. (Nos. 6696, 6813). New record for Australia.

Family CHAETODONTIDAE.

HOLACANTHUS (CHAETODONTOPLUS) PERSONIFER McCull.

Holacanthus personifer McCulloch. Rec. West. Aust. Mus. 1, pt. 3, 1914, p. 221, pl. 31.

Chaetodontoplus conspicillatus Ogilby. Mem. Qld. Mus. 3, 1915, p. 114 (*nec* Waite).

Five specimens in the collection, from South Queensland and Moreton Bay, the largest being 10½ inches in total length. (No. 4538).

Although my specimens vary somewhat in colour from *C. personifer* they agree much better with that species than with *C. conspicillatus*.¹ One specimen shows variation from the others in that it lacks the yellow spots on the face, otherwise they are alike. In all five the caudal was clear canary yellow, sharply defined on the caudal peduncle from the jet-black body. In life the head is violet-purple with bright yellow spots, and the edges of the soft dorsal and anal are narrowly edged with violet. In all five the caudal is truncate and the pectorals are shorter than the ventrals. New record for Queensland.

Family THUNNIDAE.

GYMNOSARDA NUDA Gthr.

“Scaleless Tunny.”

Pelamys nuda Gunther. Cat. Fish. Brit. Mus. 2, 1860, p. 368.

Gymnosarda nuda Kishinouye. Jour. Coll. Agric. Tokyo, 8, No. 3, 1923, p. 426, pl. 22, fig. 37.

A specimen forwarded from Townsville is evidently this supposedly rare species and agrees very well with Kishinouye's external description and his plate, except that in the Townsville specimen the pectoral is 5.6 and the head 3.86 in the total length, which is 32 inches from tip of snout to end of median caudal ray. The colour has evidently been dark bluish above, greyish-white on the belly, with the fins blackish or greyish and the tips of the dorsal and anal whitish; the seven dorsal finlets were evidently blue in life and the seven anal ones, now creamy-fawn, were probably yellow. (No. 6583). Caught by Mr. H. Miller.

I am unable to find any reference to the species since Kishinouye noted it in 1923, stating that it is “known from the tropical regions of Indo-Pacific waters.” Fowler does not mention the species in his “Fishes of Oceania” nor does Day in his “Fishes of India.”

¹ Waite. Aust. Mus. Mem. 4, “Thetis Exp.” 1, Fishes, 1899, p. 87, pl. 15.

The species is common in North Queensland as evinced by the remarks of Mr. Miller, a fisherman familiar with our other allied species. In discussing the Yellow-fin and this species with Mr. G. Coates, he stated that the Scaleless Tunny (*G. nuda*) "is much more plentiful and the largest fish was 50 lbs., but averaged much smaller." He has "seen quite good shoals" and "has caught a large number all told. Several times caught a dozen or so. . . . Are great fighters and so far have all been caught on outer reefs . . . selling quality same as Yellow-fin" (*Neothunnus macropterus*). Mr. Hole, another fisherman who fishes the Mackerel, (*S. commersoni*) from Gladstone to Townsville, states "Scaleless Tunny are fairly plentiful and the largest fish caught was 90 pounds. Mostly caught on outer reefs." New record for Australia.

ACANTHOCYBIUM SOLANDRI (Cuv. & Val.).

Wahoo.

Cybiium solandri Cuvier and Valenciennes. Hist. Nat. Poiss. 8, 1831, p. 192.

The presence of this species on our coast has only been made known since the advent of the big game fishing clubs. They have proved from many captures that it is a fairly common fish in South Queensland waters, but apparently becoming rare in the north. A head is in the collection, taken from a thirty-five pound example caught off John Brewer Reef near Townsville by G. Coates. (No. 6075).

Family SIGANIDAE.

SIGANUS SPINUS (Linn.).

Sparus spinus Linnaeus. Syst. Nat. ed. 10, Vol. 1, 1758, p. 281 (*vide* Fowler).

Three specimens from the reefs off Townsville, collected by G. Coates. Total lengths, 5, 6 $\frac{1}{4}$ and 6 $\frac{1}{2}$ inches. (Nos. 6308-9, 6023). New record for Australia.

SIGANUS PUNCTATUS (Schneider).

Amphacanthus punctatus Schneider. Syst. Ichth. Bloch. 1801, p. 210.

Siganus capricornensis Whitley. Austr. Zool. 4, pt. 4, 1926, p. 231, pl. 33.

Several specimens in the collection. They range from the Capricorns to Cape York, the largest being two collected on Keeper Reef, off Townsville, by G. Coates. Total lengths 17 and 18 inches. (Nos. 6783-4). The species is most variable in colour, ranging from a ground colour of dark brown with lighter brown spots to clear blue, blue-green or green and spotted with light or dark yellow all over head, body and dorsal and anal spines and rays: pectorals and anal without spots.

Family TEUTHIDAE.

TEUTHIS TRIOSTEGUS (Linn.).

Chaetodon triostegus Linnaeus. Syst. Nat. ed. 10, 1758, p. 274, ed. 12, 1766, p. 463.

Acanthurus hirundo Bennett. Fishes of Ceylon, 1828, pl. 11.

Teuthisroughtoni Whitley. Rec. Austr. Mus. 16, 1928, p. 233, pl. 16, fig. 1.

Six specimens of this distinctively marked species are in the collection. One (6 $\frac{3}{4}$ inches in total length) from Moreton Bay, the others from the reefs off Townsville. Presented by G. Coates. (Nos. 6017-8; 6299-6302). The largest of these measures 7 inches. I can see no reason for considering *T.roughtoni*

to be distinct from *T. triostegus*. Whitley bases his species on the difference in colour, for he states "Near *Teuthis triostegus* (Linn.), but that species has no subhorizontal dark stripe separating the darker ground colour from the cream ventral area." Of *Acanthurus hirundo* Bennett he says "Bennett's figure of *Acanthurus hirundo* shows faint indications of the dividing stripes, but differs in the disposition of the body stripes." This is surely "splitting hairs," as a glance at Bennett's plate will show. The dark sub-horizontal stripe of which he speaks is in varying stages of clearness in my specimens and in one it is practically absent.

Bennett's figure differs from my specimens in that the second stripe, which extends from the pectoral origin to the first dorsal spine, is curved forward. This is obviously due to the artist's faulty drawing, which shows the first dorsal spine too far in advance of the pectoral origin.

PRIONURUS MICROLEPIDOTUS Lacé.

Prionurus microlepidotus Lacépède. Ann. Mus. d'hist. Nat. 4, 1804, p. 205 (vernac.) and 211 (*vide* McCulloch).

Two specimens in the collection, one 6½ inches, the other 9 inches in total length. Both are from Moreton Bay, the latter presented by Alderman W. R. Howard. (No. 4882). New record for Queensland.

NASO LITURATUS (Forster).

Harpurus lituratus Forster. Descrip. Anim. ed. Licht. (1844) p. 218 (*vide* Herre).

Naso lituratus Herre. Phil. Jour. Sci. 34, 1927, No. 4, p. 464, pl. 16, fig. 1.

One specimen, 10 inches in total length, from Raine Island, Torres Strait, presented by Dr. J. R. Tosh in 1914, has been identified as this species. New record for Australia. (No. 1719).

Family SYNAPTURIDAE.

SYNAPTURA SETIFER Paradise.

Synaptura setifer Paradise. Mem. Qld. Mus. 9, 1, Apl. 28, 1927, p. 101, fig. 3. Port Darwin, N. Terr.

Four specimens from Cape Cleveland, near Townsville, North Queensland. Collected by G. Coates. The total lengths are from 4½ to 6½ inches. (Nos. 6120-3; 6192; 6887). New record for Queensland.

Family POMACENTRIDAE.

POMACENTRUS VIOLESCENS (Blkr.).

Pristotis violescens Bleeker. Jour. Ind. Arch., 2, 1848, p. 637.

Thirty-five specimens from West Molle Island, Whitsunday Passage, North Queensland, the largest 2 inches in total length, and another ten specimens from Esk Island, Palm Group, North Queensland, the largest being 2 inches. The life colours were:—General colour brownish-black, grey on belly; posterior half of soft dorsal, anal and entire caudal fin cadmium-yellow; caudal produced on both lobes to a black attenuated ray; spines and rays of the fins black, the membranes lighter; pupil of eye surrounded by a wide red ring. They showed little or no variation. New record for Australia.

Family LABRIDAE.

HALICHOERES MELANURUS (Blkr.).

Julis (Halichoeres) melanurus Bleeker. Nat. Tijdschr. Ned. Indie, 2, 1851, p. 251 (fide Fowler).

I collected one example of this species at Yorke Island, Torres Strait. It measures $2\frac{1}{2}$ inches in total length. (No. 6382). New record for Australia.

HALICHOERES HOEVENII Blkr.

Julis (Halichoeres) hoevenii Bleeker. Nat. Tijdschr. Ned. Indie, 2, 1851, p. 250 (fide Fowler).

Six specimens from Yorke Island, Torres Strait, collected T. C. Marshall, each $2\frac{1}{2}$ inches in total length. (No. 6377). New record for Australia.

LABRICHTHYS CYANOTAENIA Blkr.

Tube-lip.

Labrichthys cyanotaenia Bleeker. Nat. Tijdschr. Ned. Indie, 6, 1854, p. 331.

Labrichthys cyanotaenia Herre. Fishes of Crane Pacific Exp. Field Mus. Nat. Hist. U.S.A. 21, pub. 353, 1936, p. 304.

One example from Palm Island, North Queensland, collected T. C. Marshall. Total length, $4\frac{3}{4}$ inches. Two others from the reefs off Townsville, collected by G. Coates. Total length, 4 and $4\frac{1}{2}$ inches. New record for Australia.

Herre mentions in his description the curious lips of this labrid, remarking on the fact that that feature has never been adequately noticed by any who have mentioned the species. It is clearly seen in all my specimens.